TO9320 "B0824T660

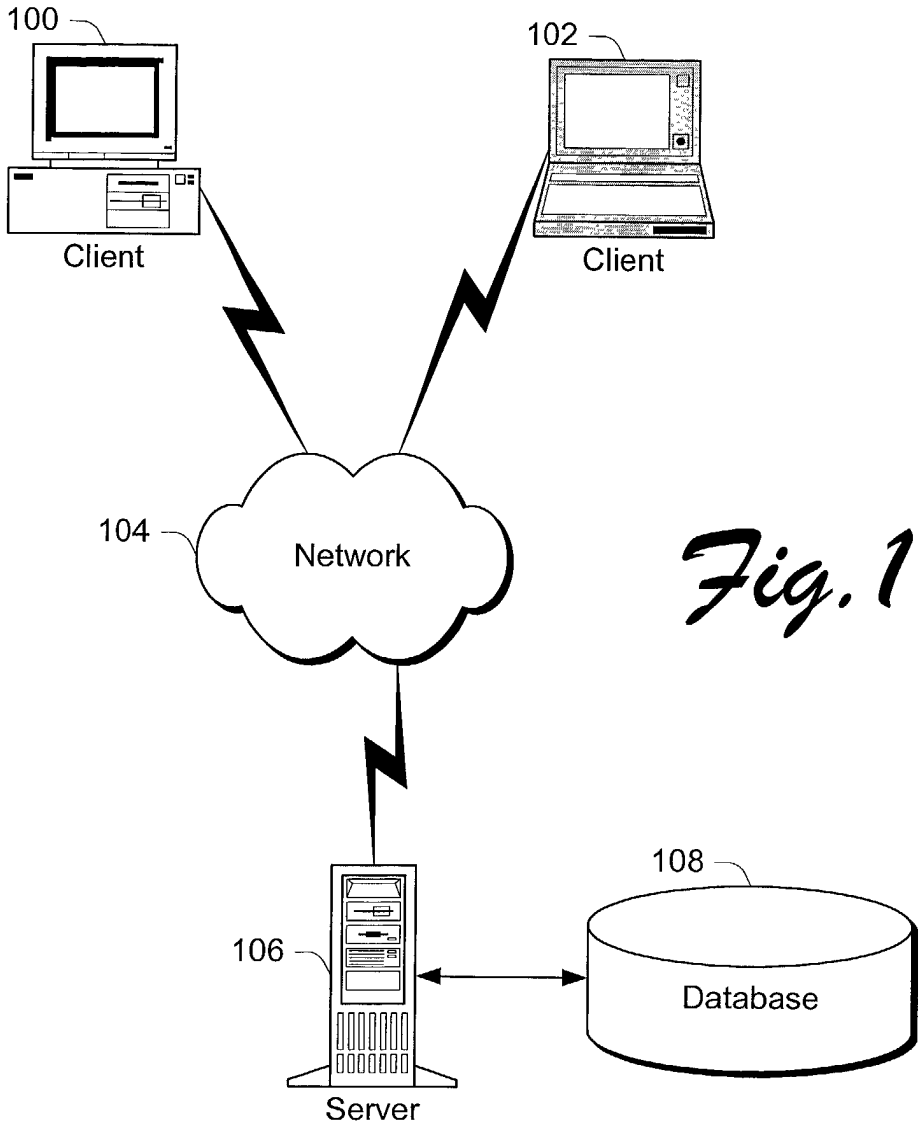

Fig. 1

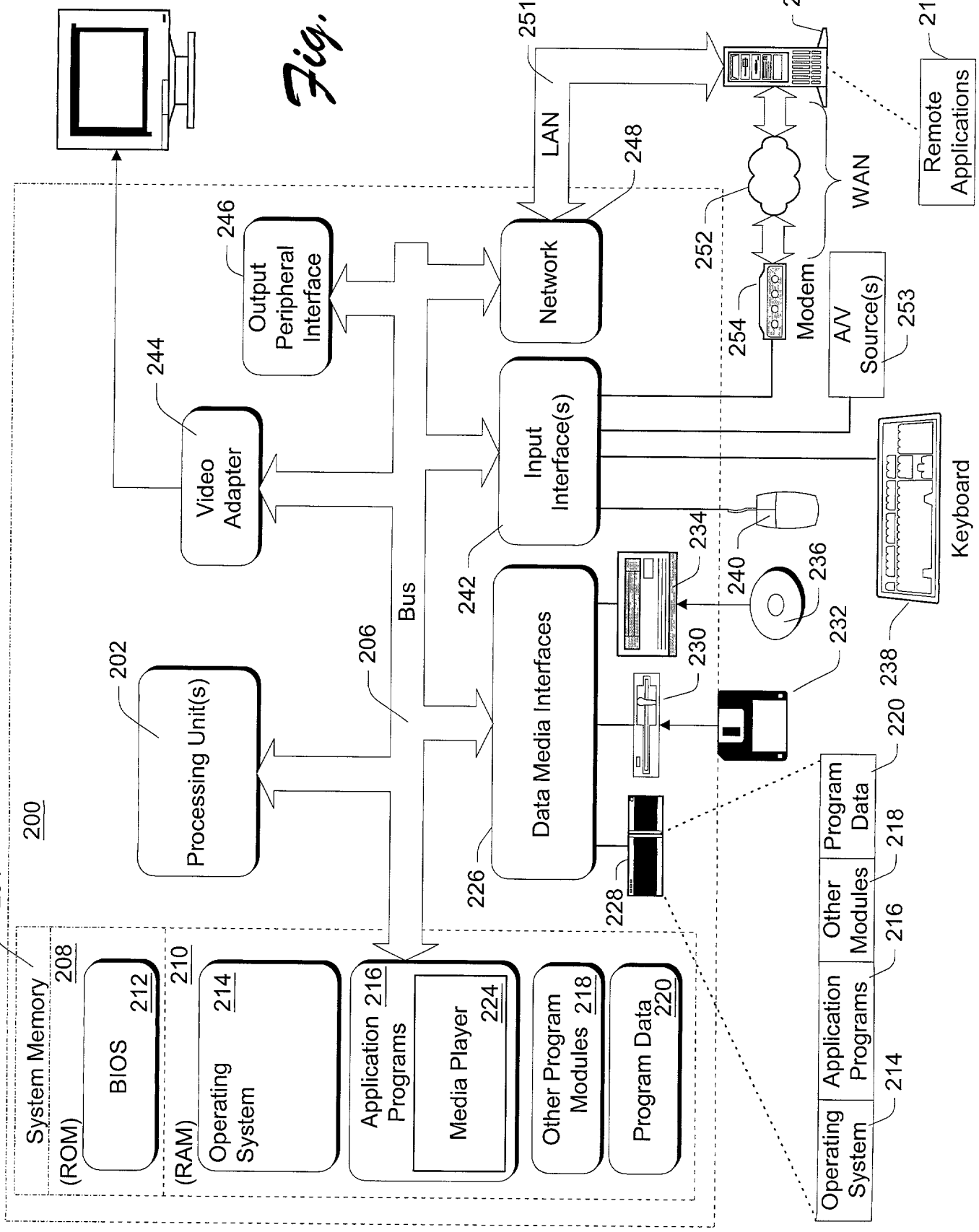
200
204
System Memory
(ROM)
208
BIOS
212
(RAM)
210
Operating System
214
Application Programs
216
Media Player
224
Other Program Modules
218
Program Data
220
Processing Unit(s)
202
Bus
206
Video Adapter
244
Output Peripheral Interface
246
Network
248
Input Interface(s)
242
Data Media Interfaces
226
228
230
232
234
236
238
240
Keyboard
LAN
251
WAN
252
Modem
254
A/V Source(s)
253
250
Remote Applications
216
Operating System
214
Application Programs
216
Other Modules
218
Program Data
220

Fig. 2

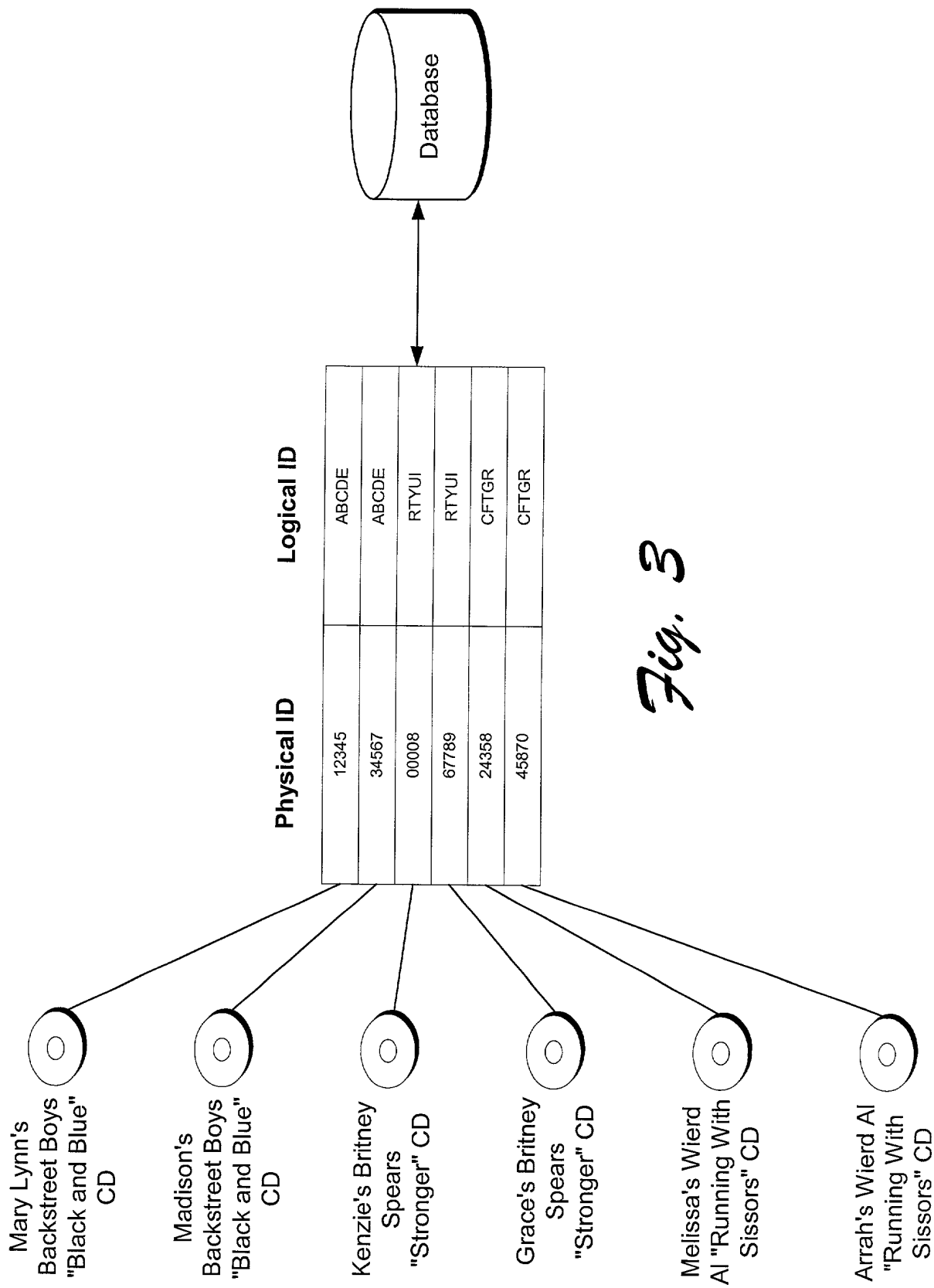
Database
Physical ID
Logical ID
12345
ABCDE
34567
ABCDE
00008
RTYUI
67789
RTYUI
24358
CFTGR
45870
CFTGR
Mary Lynn's Backstreet Boys "Black and Blue" CD
Madison's Backstreet Boys "Black and Blue" CD
Kenzie's Britney Spears "Stronger" CD
Grace's Britney Spears "Stronger" CD
Melissa's Wierd Al "Running With Sissors" CD
Arrah's Wierd Al "Running With Sissors" CD

Fig. 3

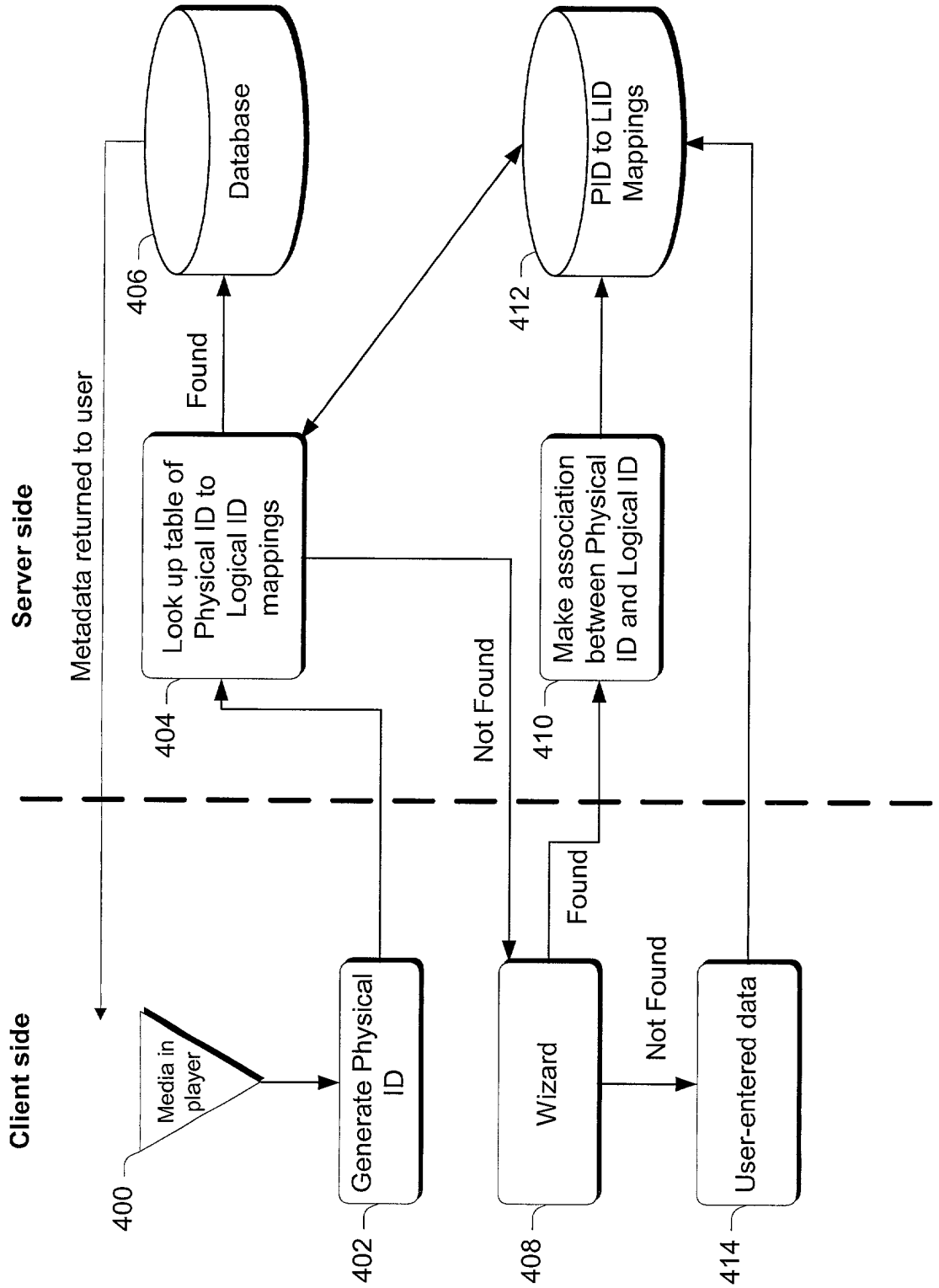
Client side
Server side
Media in player
400
Generate Physical ID
402
Metadata returned to user
Look up table of Physical ID to Logical ID mappings
404
Found
Database
406
Not Found
Wizard
408
Found
Not Found
Make association between Physical ID and Logical ID
410
PID to LID Mappings
412
User-entered data
414

Fig. 4

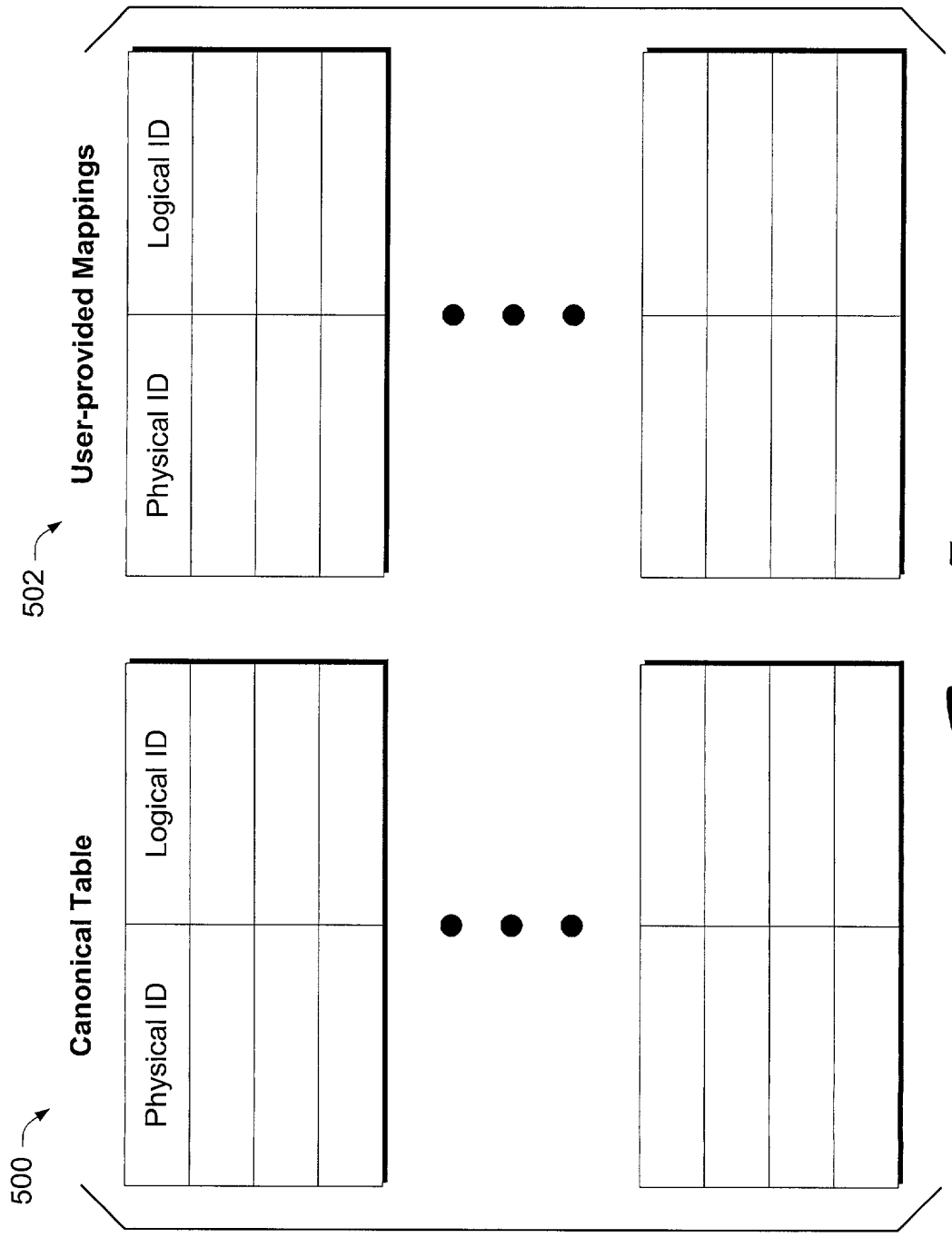
500
Canonical Table
Physical ID
Logical ID
502
User-provided Mappings
Physical ID
Logical ID

Fig. 5

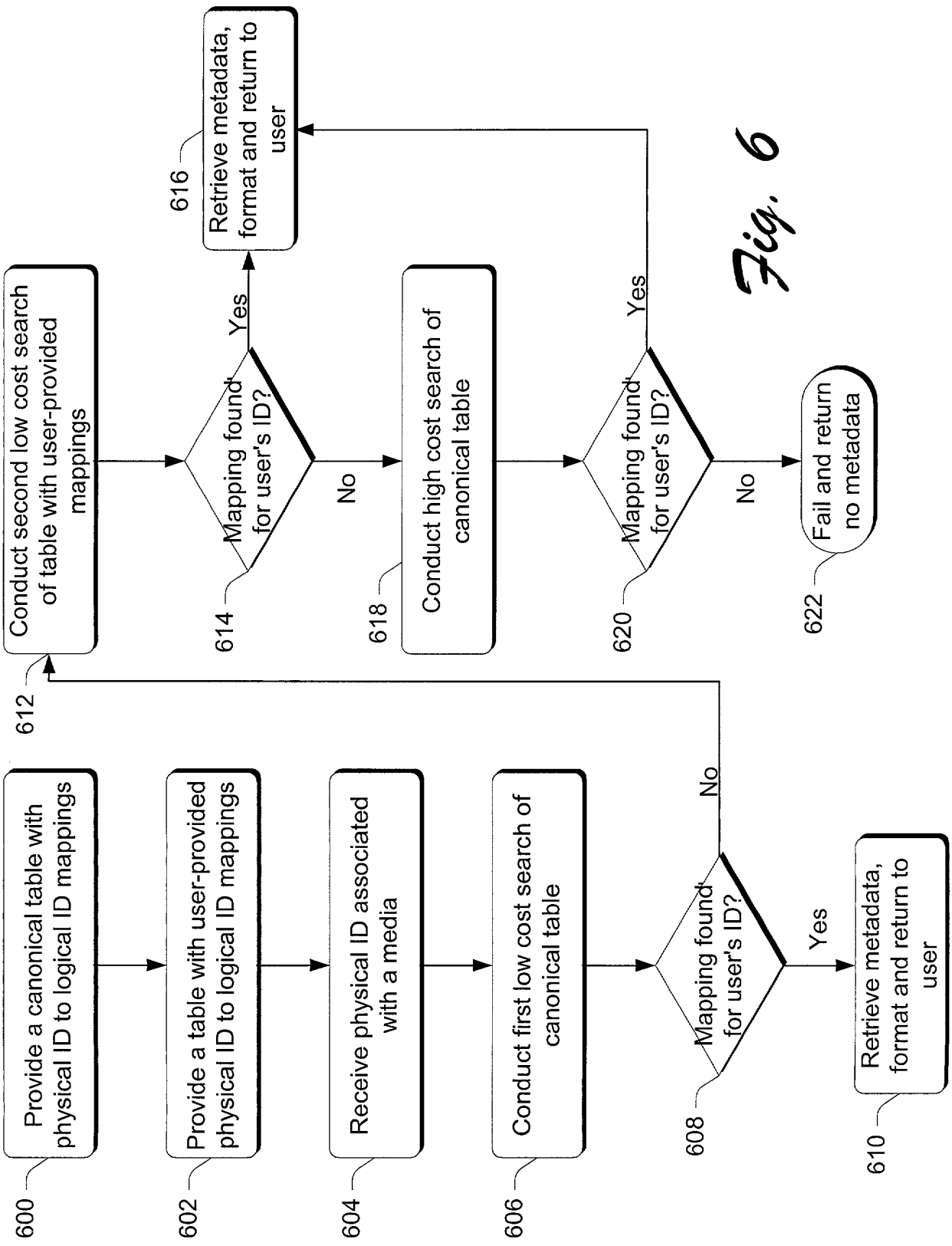
Provide a canonical table with physical ID to logical ID mappings
600
Provide a table with user-provided physical ID to logical ID mappings
602
Receive physical ID associated with a media
604
Conduct first low cost search of canonical table
606
Mapping found for user's ID?
608
Yes
No
Retrieve metadata, format and return to user
610
612
Conduct second low cost search of table with user-provided mappings
Mapping found for user's ID?
614
Yes
No
Retrieve metadata, format and return to user
616
Conduct high cost search of canonical table
618
Mapping found for user's ID?
620
Yes
No
Fail and return no metadata
622

Fig. 6

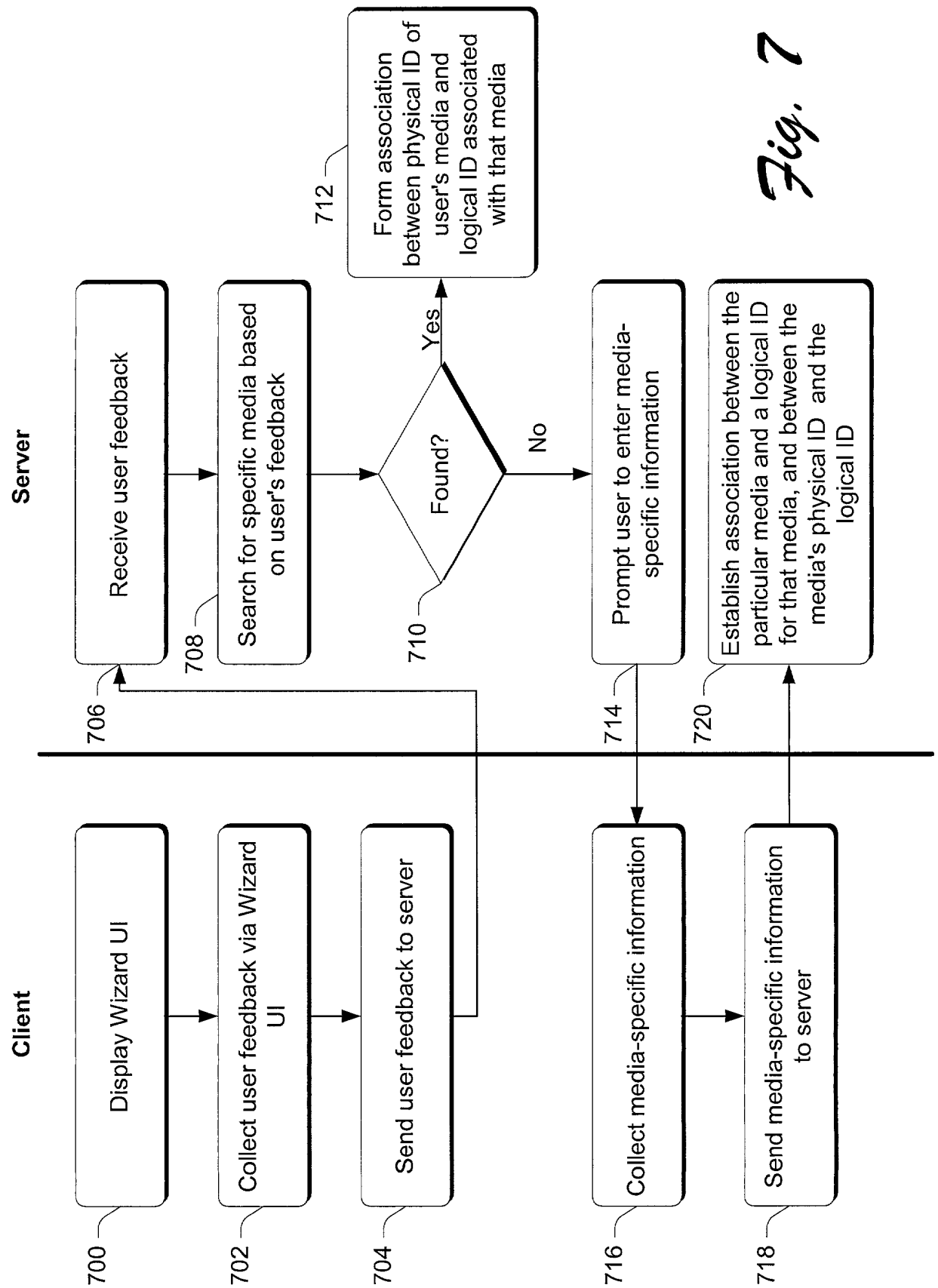
Client
Server
Display Wizard UI
Collect user feedback via Wizard UI
Send user feedback to server
Receive user feedback
Search for specific media based on user's feedback
Found?
Yes
No
Form association between physical ID of user's media and logical ID associated with that media
Prompt user to enter media-specific information
Collect media-specific information
Send media-specific information to server
Establish association between the particular media and a logical ID for that media, and between the media's physical ID and the logical ID
700
702
704
706
708
710
712
714
716
718
720

Fig. 7

800

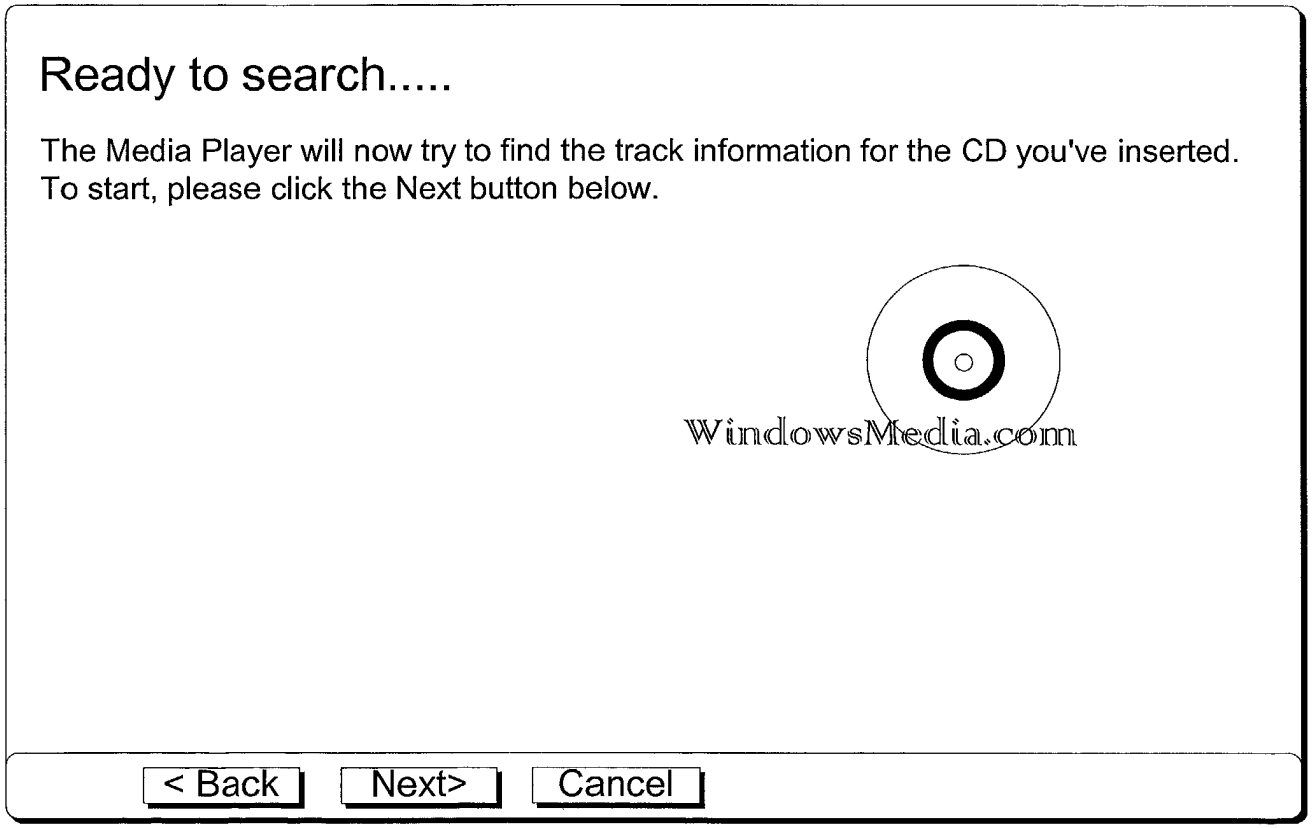
Ready to search.....
The Media Player will now try to find the track information for the CD you've inserted.
To start, please click the Next button below.
WindowsMedia.com
< Back
Next>
Cancel

Fig. 8

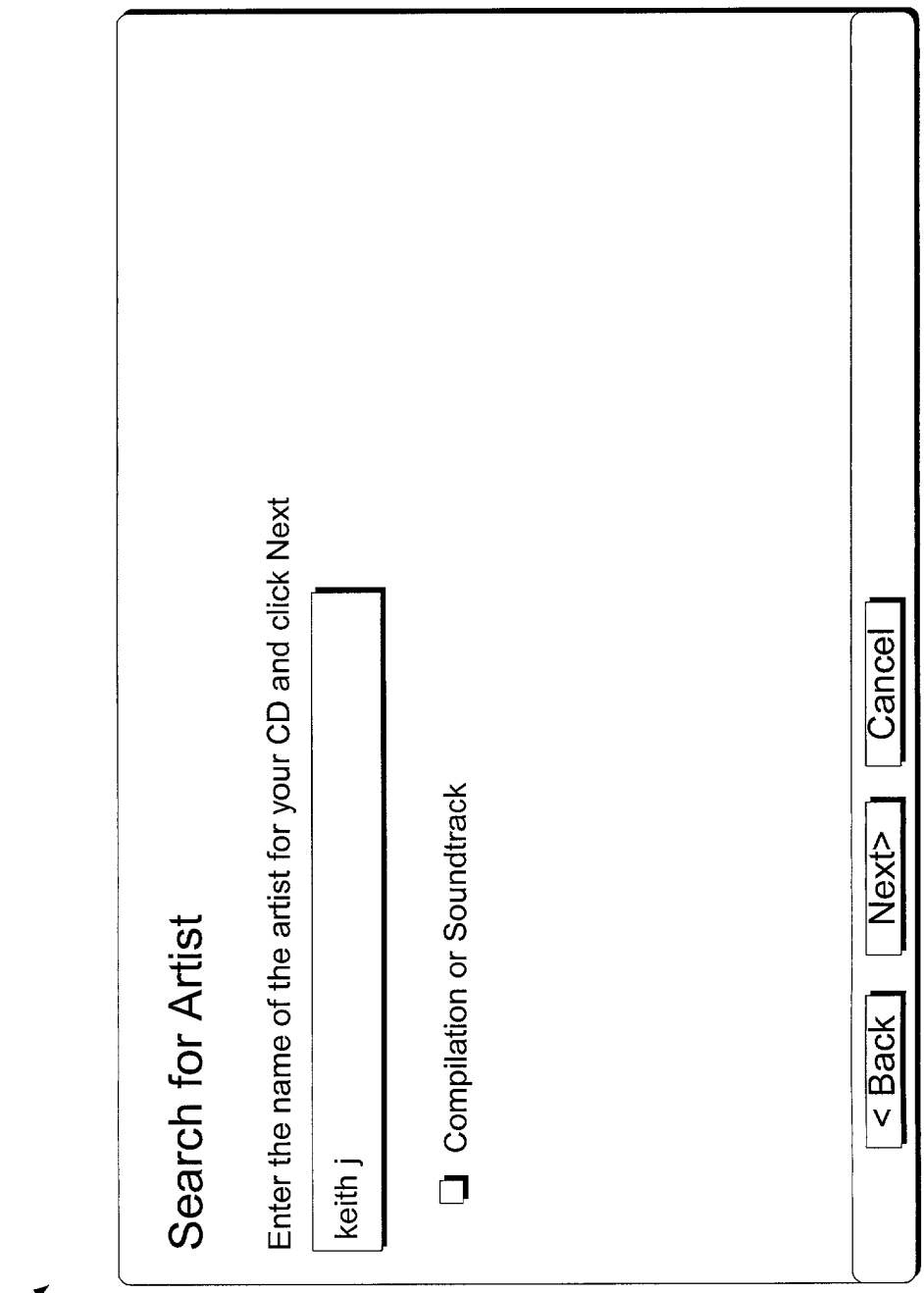
800
Search for Artist
Enter the name of the artist for your CD and click Next
keith j
Compilation or Soundtrack
< Back
Next>
Cancel

Fig. 9

TOWZED" EDGCTBGD

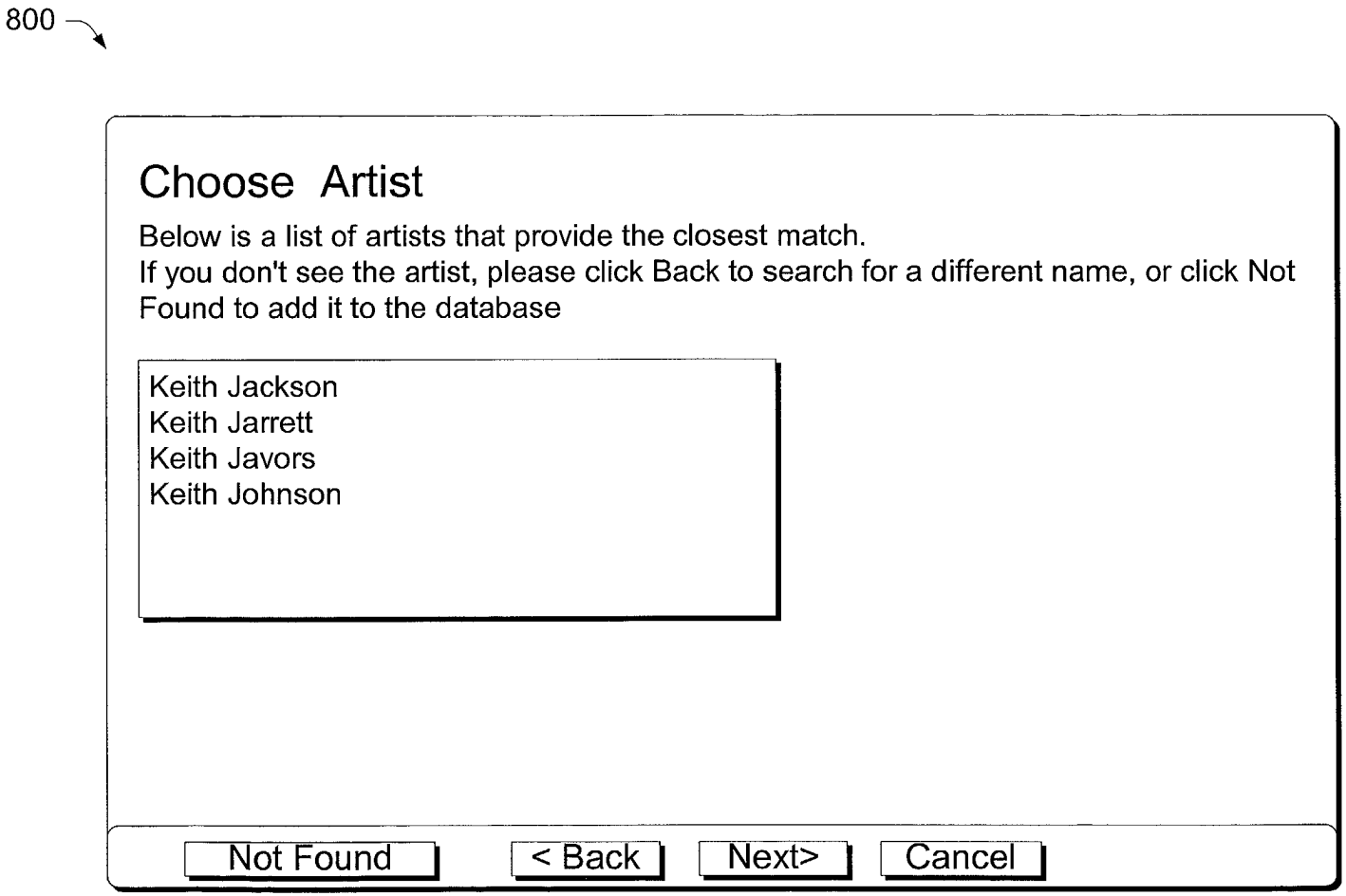

Fig. 10

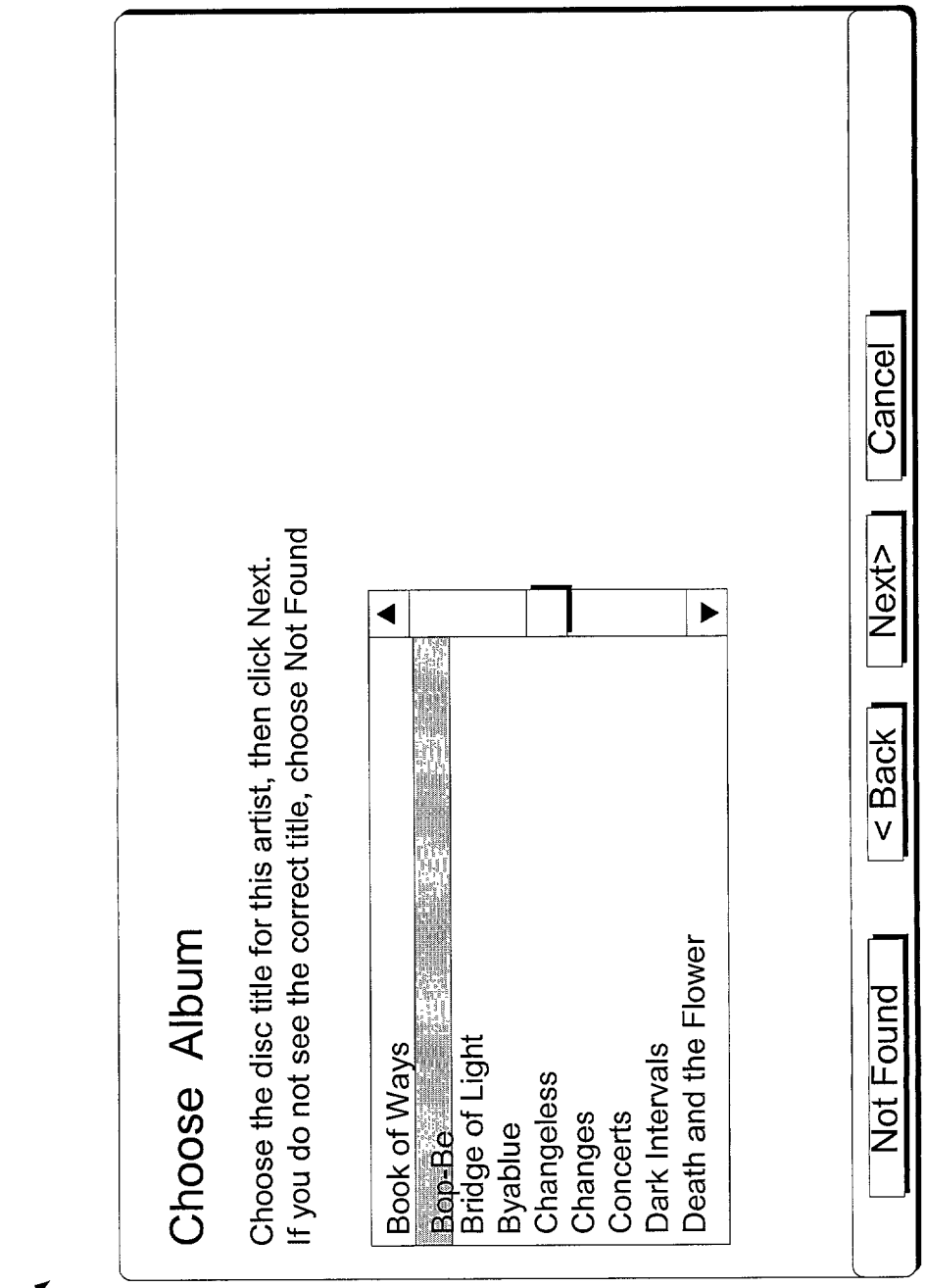
800
Choose Album
Choose the disc title for this artist, then click Next.
If you do not see the correct title, choose Not Found
Book of Ways
Bop-Be
Bridge of Light
Byablue
Changeless
Changes
Concerts
Dark Intervals
Death and the Flower
Not Found
< Back
Next>
Cancel

Fig. 11

800

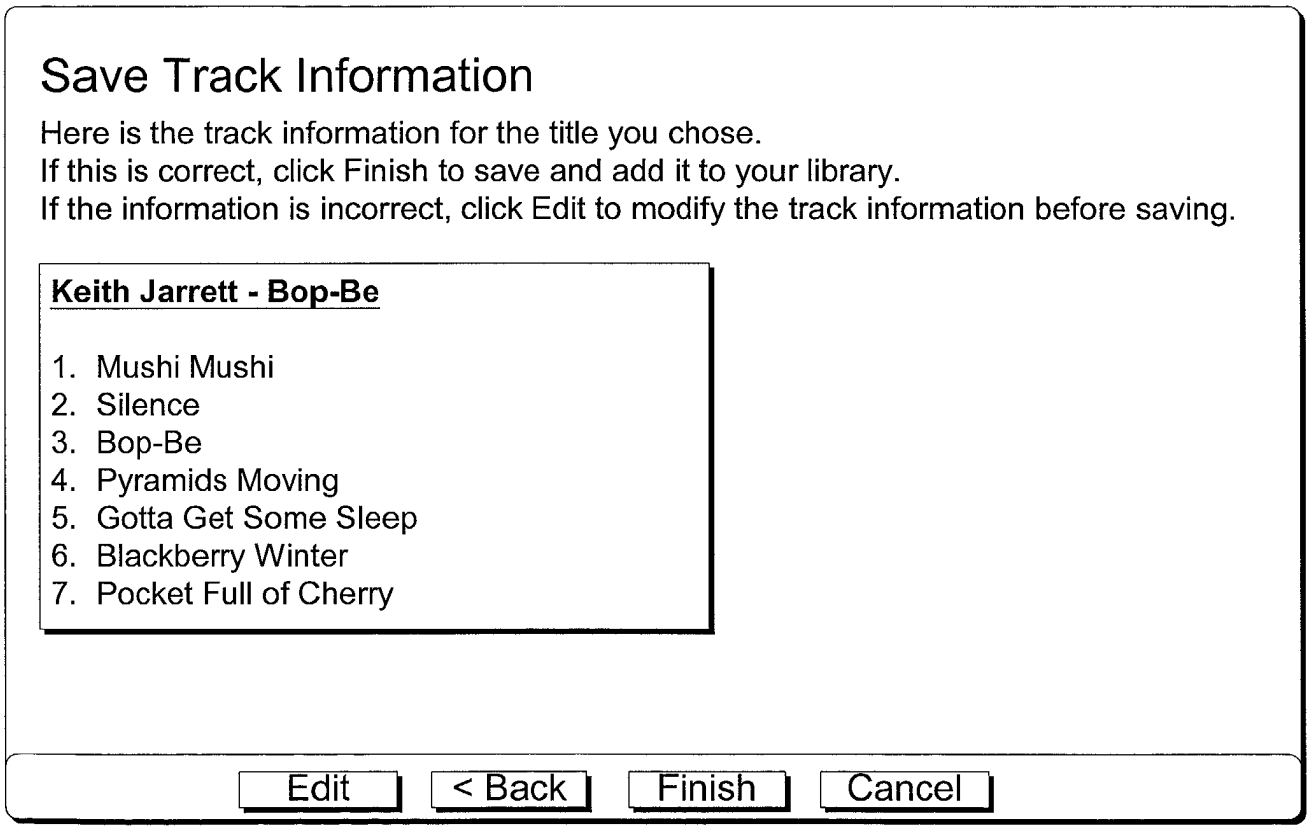
Save Track Information
Here is the track information for the title you chose.
If this is correct, click Finish to save and add it to your library.
If the information is incorrect, click Edit to modify the track information before saving.
Keith Jarrett - Bop-Be
1. Mushi Mushi
2. Silence
3. Bop-Be
4. Pyramids Moving
5. Gotta Get Some Sleep
6. Blackberry Winter
7. Pocket Full of Cherry
Edit
< Back
Finish
Cancel

Fig. 12

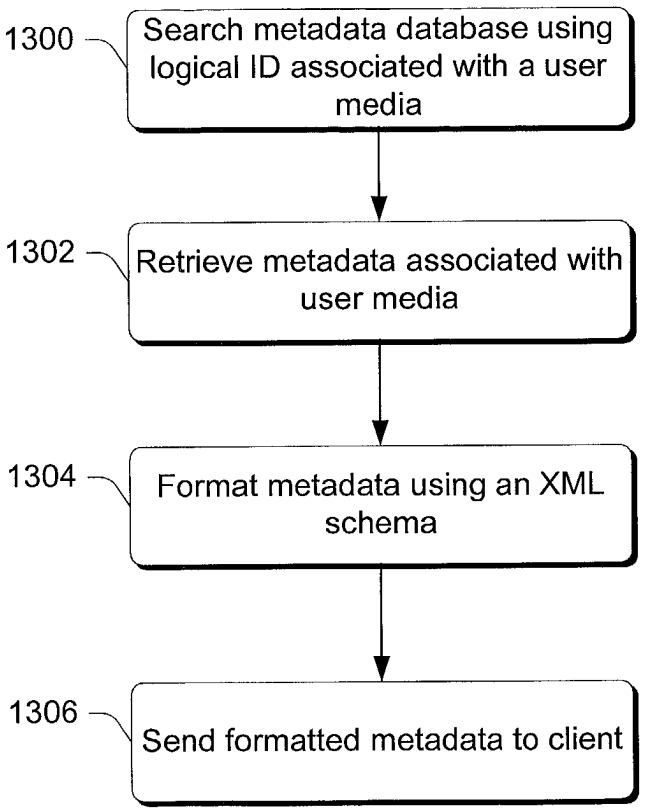
1300
Search metadata database using logical ID associated with a user media
1302
Retrieve metadata associated with user media
1304
Format metadata using an XML schema
1306
Send formatted metadata to client

Fig. 13

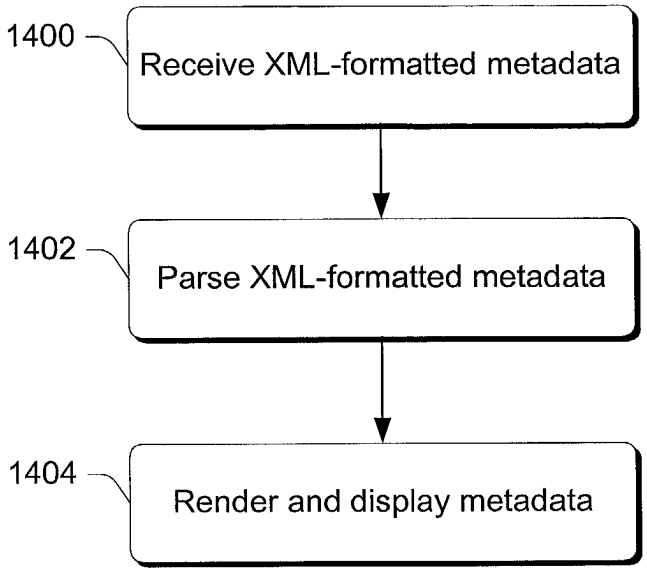
1400
Receive XML-formatted metadata
1402
Parse XML-formatted metadata
1404
Render and display metadata

Fig. 14

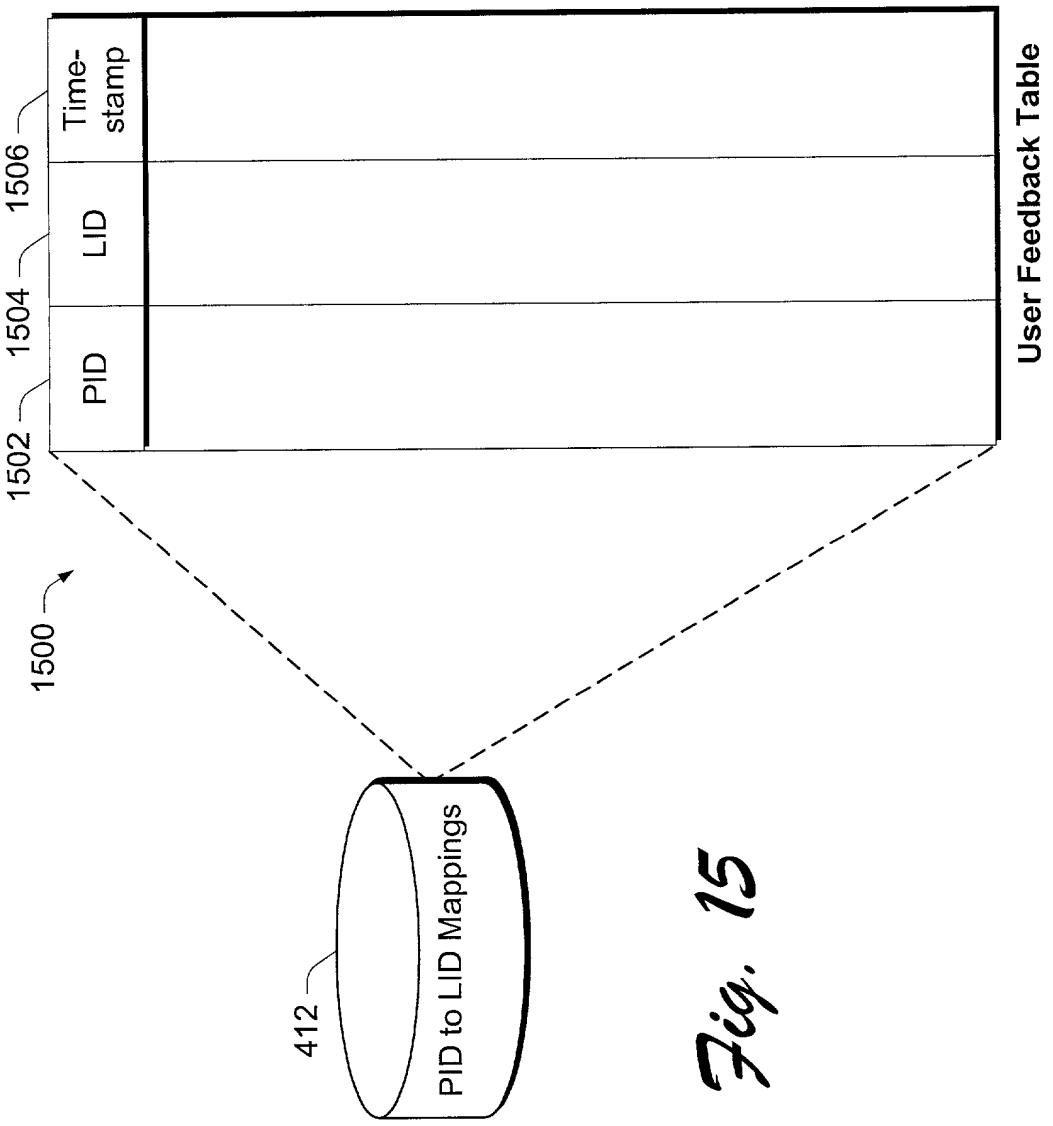
1500
1502
PID
1504
LID
1506
Time-stamp
User Feedback Table
412
PID to LID Mappings

Fig. 15

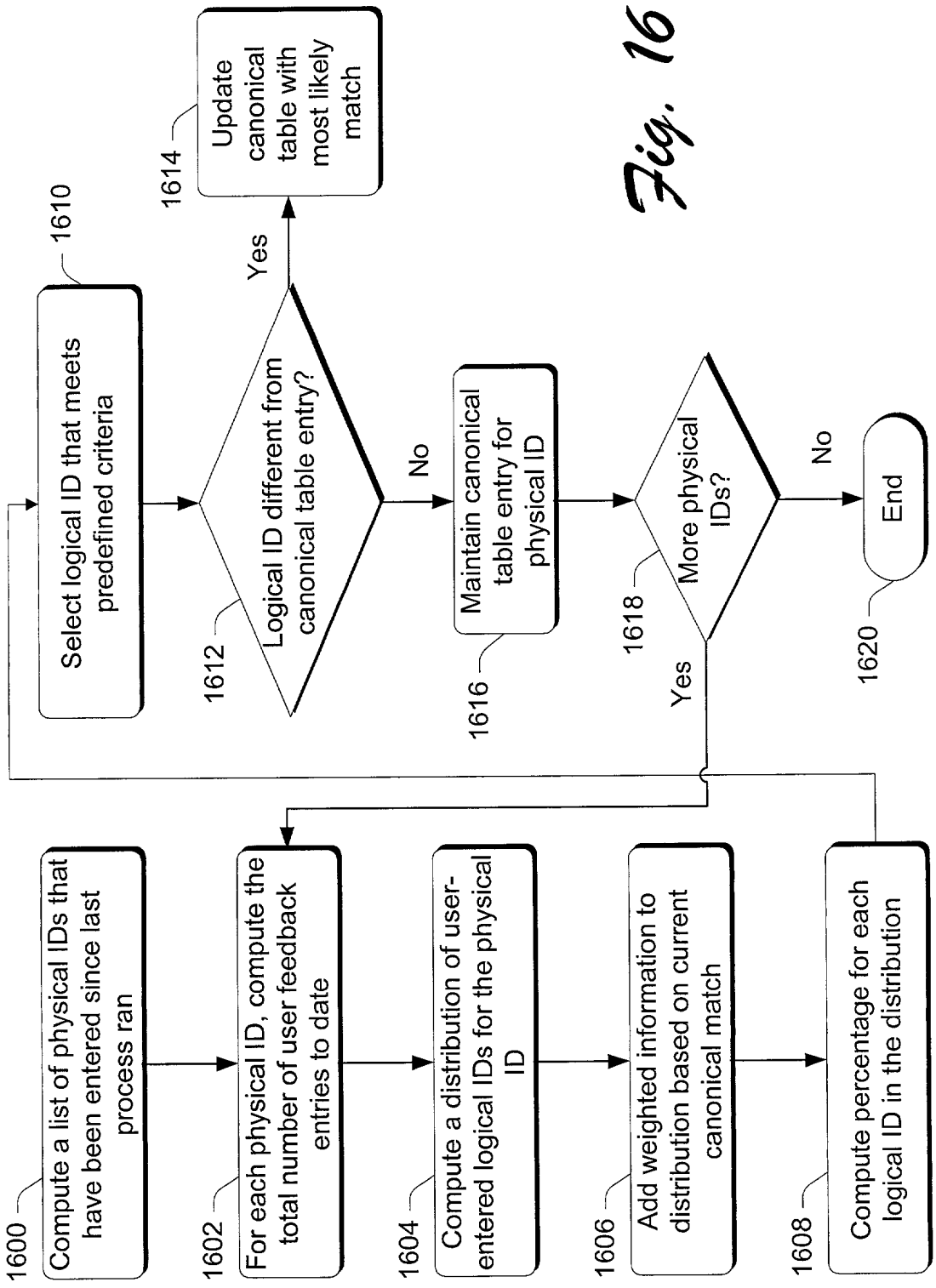
1600
Compute a list of physical IDs that have been entered since last process ran
1602
For each physical ID, compute the total number of user feedback entries to date
1604
Compute a distribution of user-entered logical IDs for the physical ID
1606
Add weighted information to distribution based on current canonical match
1608
Compute percentage for each logical ID in the distribution
1610
Select logical ID that meets predefined criteria
1612
Logical ID different from canonical table entry?
Yes
1614
Update canonical table with most likely match
No
1616
Maintain canonical table entry for physical ID
1618
More physical IDs?
Yes
No
1620
End

Fig. 16

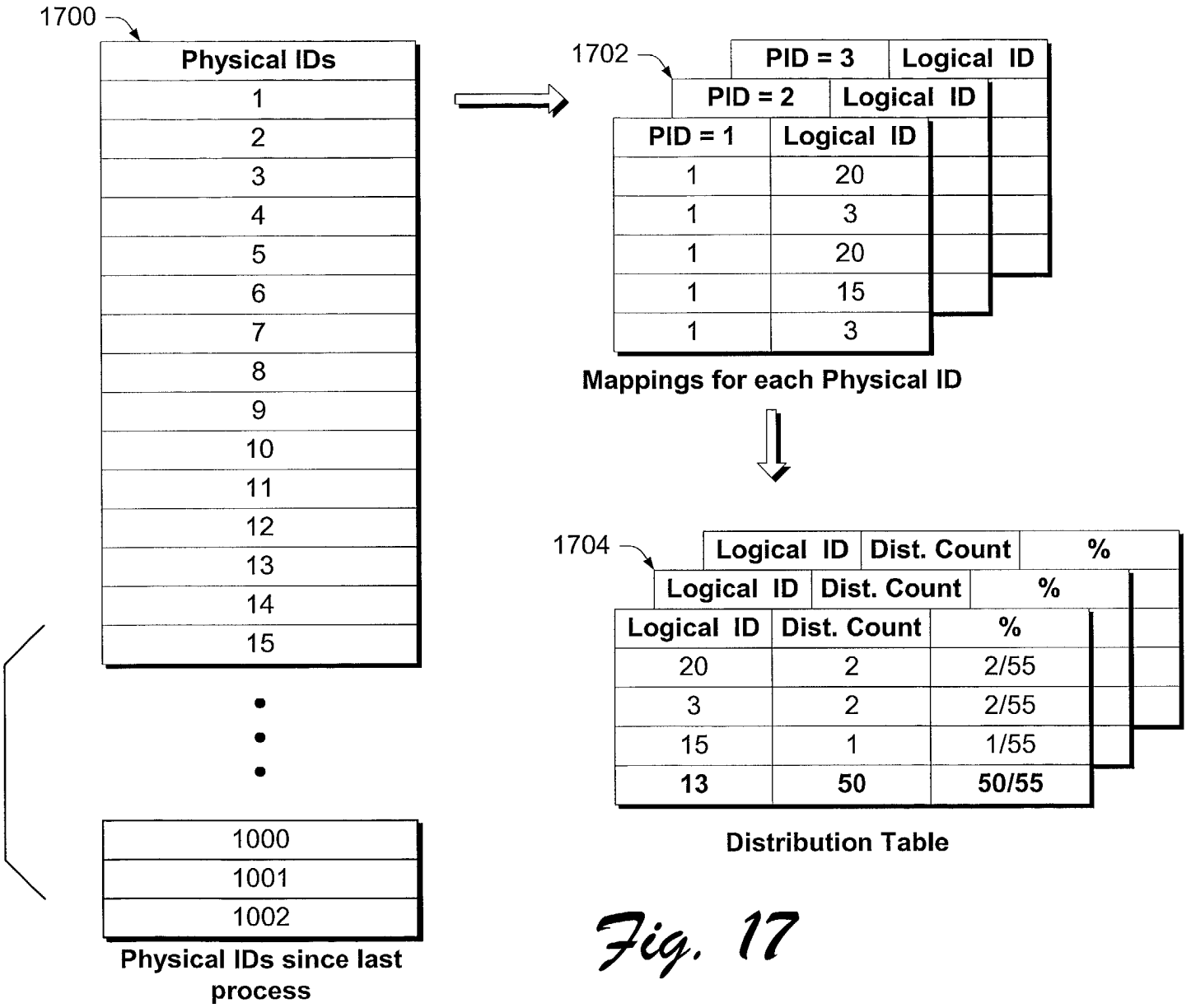
1700
Physical IDs
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
1000
1001
1002
Physical IDs since last process
1702
PID = 3
Logical ID
PID = 2
Logical ID
PID = 1
Logical ID
1 20
1 3
1 20
1 15
1 3
Mappings for each Physical ID
1704
Logical ID
Dist. Count
%
Logical ID
Dist. Count
%
Logical ID
Dist. Count
%
20 2 2/55
3 2 2/55
15 1 1/55
13 50 50/55
Distribution Table

Fig. 17